

BUREAU OF LABOR STATISTICS

Import/Export Price Indexes

How the Bureau of Labor Statistics Measures Price Change for Air Freight in the U.S. Import/Export Price Indexes

The Bureau of Labor Statistics (BLS) Import/Export and Inbound/Outbound Air Freight Indexes measure changes in air freight rates for air delivery to and from the U.S. The air freight indexes were first published in the early 1990s on a quarterly basis. Other international transportation services price indexes published by the BLS include those for air passenger fares, crude oil tanker freight, and ocean liner freight.

The U.S. Import/Export Price Indexes include two types of air freight indexes – Balance of Payments Indexes and International Services Indexes. The Balance of Payments Indexes include imports and exports, taking into account the residency of the shipper and the nationality of the air carrier. The International Services Indexes measure all inbound and outbound transactions, and do not account for the nationality of the carriers.

The Import Air Freight Index measures changes in rates paid for the transportation of freight from foreign countries to the U.S. on foreign air carriers. The Export Air Freight Index measures changes in rates paid for the transportation of freight from the U.S. to foreign countries on U.S. air carriers. It also includes freight transportation between two foreign countries provided by U.S. air carriers. For example, the rate from New York to Paris on Delta would be included in the Export Air Freight Index while the rate from Paris to New York on Delta would not. The U.S. Department of Commerce's Bureau of Economic Analysis

(BEA) is a primary user of the Import/Export Air Freight Indexes. The BEA uses these indexes to adjust the Balance of Payments Accounts and deflate the Gross Domestic Product.

The BLS publishes the Inbound/Outbound Air Freight Indexes as an alternative to the Import/Export Air Freight Indexes. The Inbound Air Freight Index measures changes in rates paid for the transportation of freight from foreign countries into the U.S. on any air carrier. The Outbound Air Freight Index measures changes in rates paid for the transportation of freight from the U.S. into foreign countries on any air carrier. For example, the rate from New York to Paris on Delta would be included in the Outbound Air Freight Index while the rate from Paris to New York on Delta would be included in the Inbound Air Freight Index. The Inbound and Outbound Air Freight Indexes are most useful for international trade, market, and economic analyses of the cost of transporting freight to and from the U.S.

Sample Design and Selection

The BLS uses the U.S. Department of Transportation's (DOT) T-100 International Market file as the sampling source for both the Import/Export and the Inbound/Outbound Air Freight Indexes. The data contained in this file include: origin and destination airports, air carrier name and nationality, and service class to identify passenger/cargo service or all cargo service.

The samples for the import and export air freight indexes are subsets of the samples selected for the U.S. inbound and outbound indexes, respectively.

A sample of company-routes representative of international air freight transportation is selected by probability methods from the T-100 sample source. A company-route is composed of an air carrier transporting freight between the city of origin and its destination. Each air freight item in these indexes is defined by the following characteristics: air carrier nationality, origin and destination airports, shipment weight, dimensions and packaging of shipment, type of commodity shipped, and type of buyer of the service.

Pricing

Pricing data for the air freight indexes are obtained directly from air carriers and reflect transaction prices for the first week of March, June, September, and December; price data are not collected during intermediate months. To determine the net freight rate, the contract or tariff freight rate is reported along with information about commissions, discounts, and surcharges.

Air freight consists of commodities, including small packages tendered to an airline for transportation. Freight does not include mail, express, or passenger baggage. The scope of the service measured is air transportation only. Therefore, the service

being priced is from airport to airport only and does not include any ground transportation or port service.

Trade Value

The revenue weights used for index calculation are derived from a regression analysis based on data from the Fraud Intelligence file of the U.S. Customs Service and the DOT's T-100 International Market file. Air freight trade value weights are updated every five years. These indexes currently are based on year 2000 trade values.

Additional Information

Additional information on the U.S. Import/Export Price Indexes can be found in "International Price Indexes," *BLS Handbook of Methods*, Bulletin 2490 (Bureau of Labor Statistics, 1997), Chapter 15. This chapter also is available on the BLS Internet site (<http://www.bls.gov/mxp>) under the topic "Publications." You may contact the International Price Program of the BLS by telephone at (202) 691-7101 or by e-mail at mxpinfo@bls.gov.

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